

## Learning About End-of-Life Care in Nursing - A Global Classroom Educational Innovation

Bailey, Cara; Orr, Michelle; Hewison, Alistair; Baernholdt, Marianne

DOI:

[10.3928/01484834-20171020-10](https://doi.org/10.3928/01484834-20171020-10)

License:

None: All rights reserved

*Document Version*

Peer reviewed version

*Citation for published version (Harvard):*

Bailey, C, Orr, M, Hewison, A & Baernholdt, M 2017, 'Learning About End-of-Life Care in Nursing - A Global Classroom Educational Innovation', *Journal of Nursing Education*, vol. 56, no. 11, pp. 688-691.  
<https://doi.org/10.3928/01484834-20171020-10>

[Link to publication on Research at Birmingham portal](#)

### **Publisher Rights Statement:**

Final Version of Record available at: [10.3928/01484834-20171020-10](https://doi.org/10.3928/01484834-20171020-10)  
Checked for eligibility: 27/04/2017

### **General rights**

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

### **Take down policy**

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact [UBIRA@lists.bham.ac.uk](mailto:UBIRA@lists.bham.ac.uk) providing details and we will remove access to the work immediately and investigate.

# Journal of Nursing Education

## Learning About End-of-Life Care in Nursing - A Global Classroom Educational Innovation

--Manuscript Draft--

<b>Manuscript Number:</b>	JNE-2017-002R1
<b>Full Title:</b>	Learning About End-of-Life Care in Nursing - A Global Classroom Educational Innovation
<b>Article Type:</b>	Educational Innovation
<b>Order of Authors:</b>	Cara Bailey, PhD, RN
	Shelly Orr, MSN, RN
	Alistair Hewison, PhD, RN
	Marianne Baernholdt, PhD, MPH, RN
<b>Order of Authors Secondary Information:</b>	
<b>Abstract:</b>	<p>Background: Teaching nursing students how to provide patient-centered end-of-life care is important and challenging. As traditional face-to-face classroom teaching is increasingly supplanted by digital technology, this presents opportunities for developing new forms of end-of-life care education. The aim of this paper is to examine how a 'global classroom' was developed using online technology, to enhance nursing students learning of end-of-life care in England and the United States.</p> <p>Method: The Plan Do Study Act (PDSA) quality improvement approach was used to guide the design and delivery of this curriculum innovation.</p> <p>Results: The global classroom enhanced the educational experience for students. Teaching needs to be inclusive, focused and engaging; the virtual platform must be stable and support individual learning; and learning needs to be collaborative and authentic.</p> <p>Conclusion: Our findings can be used to inform the integration of similar approaches to end-of-life care education in other healthcare professional preparation programs.</p>
<b>Response to Reviewers:</b>	<p>Response to Reviewer comments for JNE-2017-002R1</p> <p>Reviewer #1 Comment: The author describes the use of PDSA cycle to plan and evaluate a "global classroom" addressing learning around end-of-life nursing care. The manuscript is well written, nicely organized and is relevant to nurse educators in the US as well as other countries.</p> <p>Response: Thank you for your positive comments about the paper.</p> <p>Reviewer #1 Comment: My one recommendation is that the author clearly describe the purpose of the educational innovation paper. Is it to talk about the use of PDSA in the development of educational innovations? Is it to evaluate the use of a "global classroom"? or is it to talk about teaching and learning focused on EOL nursing care? These are all a component of the paper and interesting, but in the abstract and in the text of the paper I kept coming back to what the overall purpose of the manuscript is. I think to include a clear purpose statement and then to ensure that the rest of the paper aligns with that purpose would be very helpful.</p> <p>Response: Thank you for this helpful comment. We tried to cover a lot of ground in the paper which was necessary to provide an accurate account of the development and delivery of the 'global classroom'. However, if this has resulted in the overall purpose being unclear, this was clearly not our intention. Thank you again for bringing this to our attention. In view of this, we have made a number of changes to address this concern which we hope have improved the paper (please see below). All substantial changes in the text are in red.</p> <p>Abstract lines 15-18: A statement has been included here to emphasise the aim of the</p>

paper which is to examine how a 'global classroom' was developed using online technology, to enhance the learning of nursing students in end-of-life care. It presents an account of how this initiative was managed to demonstrate its potential for implementation more widely.

Abstract lines 20-22: A change has been made here to highlight that the development of an understanding of cultural competence in end-of-life care, on the part of the students, was a focus of the work.

Paper lines 74-79: A new paragraph has been added here which makes a clear statement about the purpose of the project: to address the policy (identified in the preceding section); to demonstrate how cultural competence can be developed using this educational approach; and to provide an account of the 'global classroom' initiative that may be helpful to others.

Paper lines 108-110, 123-126, 169-170, 196-198: Additional statements about the focus on cultural competence have been made here to clarify this aspect of the paper.

Paper lines 223-226: The final section of the conclusion has been amended to re-emphasise the overall purpose of the paper.

## Acknowledgements

We would like to acknowledge the technical support staff without whom this work would not have been possible: from the US Predrag Stojanovic, Elizabeth Miles, and Sue McGinnis; and from England Peter Horrox and David Price.

This work was supported by a Quest Global Impact Award from the Global Education Office; The Langston Center for Quality, Safety, and Innovation, School of Nursing both at Virginia Commonwealth University; and the Institute of Clinical Sciences Research Development Fund at University of Birmingham, England.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10

**Learning About End-of-Life Care in Nursing – A Global Classroom Educational  
Innovation**

## Abstract

Background: Teaching nursing students how to provide patient-centered end-of-life care is important and challenging. As traditional face-to-face classroom teaching is increasingly supplanted by digital technology, this presents opportunities for developing new forms of end-of-life care education. The aim of this paper is to examine how a ‘global classroom’ was developed using online technology, to enhance nursing students learning of end-of-life care in England and the United States.

Method: The Plan Do Study Act (PDSA) quality improvement approach was used to guide the design and delivery of this curriculum innovation.

Results: The global classroom enhanced the educational experience for students. Teaching needs to be inclusive, focused and engaging; the virtual platform must be stable and support individual learning; and learning needs to be collaborative and authentic.

Conclusion: Our findings can be used to inform the integration of similar approaches to end-of-life care education in other healthcare professional preparation programs.

*Keywords:* Global classroom, End of Life Care, US & England, Digital Technology

## Background

Palliative care, which includes end-of-life (EOL) care, helps those with advanced, progressive, incurable illness to live as well as possible until they die (U.S. National Library of Medicine, 2016). Part of good EOL care is advance care planning, which is enabling people with a life-limiting illness to make decisions about their care preferences (National Hospice and Palliative Care Organization, 2016). High quality EOL care is patient-centered (National Quality Strategy [NQS], 2014). An important consideration when teaching students how to provide person-centered care is the development of students' cultural competence through knowledge building, and acquisition of appropriate attitudes and behaviors (Riner, 2011). Cultural competence has been defined as "the capacity to provide effective healthcare taking into consideration people's cultural beliefs, behaviors, and needs" (Papadopoulos, 2003, p. 5). Teaching nursing students about cultural considerations involved in EOL care in order to promote patient-centeredness although challenging, is important because education can have a direct and positive effect on students' attitudes towards care of the dying (Bailey & Hewison, 2014). However, to be effective, the educational delivery needs careful consideration.

The pedagogical environment in higher education is rich with digital learning opportunities (Lock, 2015) and there has been an increase in the availability of e-learning on mobile and tablet devices. Students also have access to an array of asynchronous digital technologies which can support independent learning (e.g. virtual discussion forums and e-learning packages) and synchronous technologies which can be used to engage in learning with others remotely (e.g. expert lectures via videoconferencing) which support current teaching practices. It has been argued that this represents a "paradigm shift in educational thinking" (Murgatroyd & Couture, 2010, p. 20), contributing to the development of a "new culture of learning" (Thomas & Brown, 2011, p.17).

Although the potential of digital technology to enhance learning is acknowledged (Thomas & Brown, 2011), its application does not guarantee learning or collaboration (Larsson & Alterman, 2009). Educators therefore have to consider how best to integrate learning technologies in the curriculum in order to engage students and deliver high quality education. Following publication of the End-of-life Care Strategy in England (Department of Health, 2008), the content focussed on EOL care in undergraduate nursing curricula has increased (Bailey & Hewison, 2014). Although there is no direct equivalent national strategy in the United States (US), the End-of-Life Education Consortium (ELNEC) project is a national education initiative with a goal of providing nurses with the knowledge and skills they need to provide care that has a positive impact on the lives of patients and their families at the EOL (American Association of Colleges of Nursing [AACN], 2016). Furthermore, a recent landmark study recommended that educational institutions, credentialing bodies, accrediting boards, state regulatory agencies, and healthcare delivery organizations in the US establish appropriate training, certification and/or licensure requirements to strengthen palliative care knowledge and skills of all clinicians who care for individuals with advanced serious illness who are nearing the EOL (Institute of Medicine [IOM], 2014). **In recognition of this combination of factors, an educational intervention was designed that would address the overarching policy need, by focussing on a key element of person-centered care – cultural competence. In order to manage this effectively, an established service improvement model was used. The overall aim was to develop a ‘global classroom’ using online technology, to enhance the learning of nursing students in EOL care.**

### **Educational Innovation**

The global classroom project was designed to enhance the educational experience of nursing students and expand their knowledge of person-centered EOL care. The Plan Do Study Act (PDSA) method was used to structure the work. The elements of the tool include:



**Plan-** the change to be put in place, predict what will happen and identify data to be collected; **Do-** implement the change collecting the necessary data; **Study-** consider the data collected before and after the change; and **Act-** identify further changes needed based on study phase to continue improvement (Langley et al., 2009; Kilo, 1998). The underlying rationale of the approach is that short-cycle, small-scale tests, linked to reflection, can enable healthcare teams to learn from actions taken and their effects (Berwick, 2003; Iles & Sutherland, 2001). It is recommended as a helpful tool in healthcare (National Health Service Improvement, 2010; Scoville, Little, Rakover, Luther, & Mate, 2016) and widely used as it provides a framework for collaborative working (Boaden, Harvey, Moxham, & Proudlove, 2008).

### **Plan: The Global Classroom**

A global classroom is where two or more groups of students work together (in this case from two countries) to study a common topic (Nelson, 2008). A number of design principles for the global classroom were considered. Manso and Garzón (2011) suggest four components are essential in the development of effective collaborative global projects. They are: (1) The **topic** needs to be relevant and connected to the core curriculum/discipline; (2) Integration of **information and communications technology (ICT)**; (3) **Collaboration** which implies a commitment to learn together and to co-operate in the achievement of something that cannot be achieved individually; and (4) **Exchange** of information to allow the activity to advance with clear criteria that specify the nature of student participation (Manso & Garzón, 2011).

The project team considered each component when making decisions and planning the structure and delivery of the global classroom. Advance care planning was identified as a crucial process in EoL care that the students could explore in classroom lectures and group activity. **It was selected because it is central to practice, incorporates consideration of cultural**

competence as part of person-centered care, and was consistent with the learning outcomes at both universities. With the assistance and support of Information Technology (IT) staff at both institutions, virtual platforms were chosen that were reliable, user friendly, and allowed for asynchronous and synchronous collaboration. Lastly, a group activity was chosen that was achievable in a short timescale, realistic in terms of workload so as not to overburden the students, and purposeful in terms of developing their learning. The expectations in terms of student participation, professionalism, and peer communication were clearly delineated in a supporting document provided for both groups.

Three synchronous classroom sessions were planned over a six-week period using Zoom™. Zoom is an innovative web-based conferencing system that allows for video, audio, and screen sharing capabilities (Zoom Video Communications, Inc., 2016). The first session planned was an introduction where students and faculty could meet, and a technology check for proper functioning could be undertaken. Students were required to view films produced by the faculty team which summarized the English and US healthcare systems prior to the scheduled introduction session to provide necessary background information. The second session was a joint lecture from faculty at both sites on advance care planning, highlighting the differences between the approaches in the US and England particularly with regard to cultural competence. Finally, the third session was an interactive discussion about the movie Wit, specifically the patient's experience of EOL care and the roles of members of the healthcare team. Palliative care clinical colleagues from both sites were invited to contribute to the discussion along with the faculty. Additionally, the students were asked to organize two 'virtual' small group meetings to work synchronously on a group activity (an e-resource on advance care planning for patients and families). Each group included participants from both countries who were able to connect using Slack™. Slack is a messaging application that allows group members to create channels for conversations, both

synchronized and archived, and share files (Slack, 2016). Seventy-five students from the US and 54 students from England participated. This planning provided a firm basis for the next ‘do’ phase of the project.

### **Do: Global Connections**

The global classroom brought together experts in EOL care from the US and England to provide undergraduate nursing students in the two countries with a unique learning opportunity. During the course of the project, the students built a relationship with the lecturers from both countries as well as with their peers. In the Slack channel project groups there was a sense of camaraderie and comments indicated that learning about different healthcare systems as well as differences in nursing education in the two countries occurred. The students commented that they enjoyed working ‘together’. All of the groups produced an electronic resource on advanced care planning. These took the form of blogs, infographics, leaflets, webpages, and e-presentations. These outputs indicate that the global classroom was purposeful and had significance for student learning.

### **Study: Evaluation and Limitations**

As with any change, evaluation of the global classroom was important in order to make any modifications necessary to improve the quality of the learning experience for students and to integrate this approach into the curricula at both institutions on a permanent basis if it was found to be effective in enhancing learning. Since this first offer was a feasibility study, most attention was given to the logistics. We evaluated whether the content was placed in the right place in the two curricula, if the information technology (IT) platform was ‘fit for purpose’, if the students were able to participate in both the synchronous classroom and the group work, and if their group assignments were meaningful.

We collected feedback from students via email and personal conversations. Overall, the feedback received was positive and suggestions for improvement corresponded with areas identified by the project team. Students commented on the difficulties presented by different time zones and working patterns making it challenging to meet up virtually to work on the group activity, however the majority of comments were positive:

*“It was definitely a challenge being busy students working with other busy students across the world, but I love the idea of the program and it was neat to learn about another country and their nursing processes.”*

Although we focused our efforts on ensuring students knew how to connect via Slack, their schedules were also a limiting factor. There were further issues with the synchronous global classroom as the first one was cancelled due to a snowstorm in the US. This limited the time available for the students to meet each other and familiarize themselves with the global classroom before they were taught some of the more difficult areas of EOL care (e.g. discussion of cultural sensitivities) and so engagement of students was delayed. At times both the faculty and students felt there was insufficient time to reflect on content, learning, and development of next steps in depth. Despite this, the reflective comments were positive. For example, after the first session students said:

*“I am quite excited about working with [the US University]. I think this is a great opportunity and cannot wait to see the differences”.*

*“I’m greatly looking forward to this opportunity as I am interested in the US and really appreciate the hard work you have put in to making this a reality”.*

### **Act: Plans for the Next Global Classroom**

The global classroom is a beneficial educational innovation that can be incorporated into the curriculum with careful planning. Based on our evaluation, in future iterations, the

global classroom will be delivered using a cumulative approach. Instead of having all content on EOL care in one course at each university, we will deliver the content over three semesters and three courses. We plan to have an introductory session in semester one, a second session in semester two, and a third session in semester three. We hope this will afford the students time to digest content and to get to know each other better in the activity peer groups which is what they enjoyed the most. Further, the EOL care content will feel more like an integral part of the respective educational programs that provides consistency and constancy as a whole rather than being viewed as an additional project in one course. We are also exploring how to expand the global classroom to include students from the wider healthcare team; for example, students from medicine and the allied health professions.

### Discussion

The intention of engaging in a detailed planning process was to try and ensure that the global classroom was based on sound educational principles and that the complex logistical challenges involved in delivering the experience were addressed. We considered four components in the planning stage in order to engage students and promote inclusive learning in a global context. First, the topic needs to be engaging, and appropriate for all students. **The focus on EOL care, and specifically cultural competence as part of advance care planning, was appropriate because it was an issue of concern for both groups of students.** Second, the virtual platform has to be stable but flexible enough to meet the requirements for learning such as easy uploading of documents, sharing views of documents, and enabling virtual discussion to foster student cohesion. Zoom worked successfully for the virtual links for the classroom activities and Slack was an ideal platform for the group work as it enabled students to work together in small groups, share ideas, and learn from the experiences of their peers. Third, collaboration was key to the success of this project which involved 129 students. Having ‘buy in’ from the universities, other faculty, and students was essential as was the

expertise of subject and technology specialists. Also, regular and frequent communication between faculty was important. Fourth, the group activity had to be purposeful and achievable. All groups produced e-resources on advance care planning and feedback was positive in terms of international linking and learning opportunities (Examples: <https://endoflifecaresite.wordpress.com/>, <https://prezi.com/3aa8mkdhgpwr/advanced-care-decisions/>). The development of cultural competence was apparent in the e-resources produced, as demonstrated by those that focused on the individualized needs of patients and their families. For example, one group created a google document highlighting the issues involved in agreeing to a ‘do-not-resuscitate’ order as part of EOL decision making (Figure 2).

### Conclusion

In summary, the global classroom was a success, but to increase its impact in the future we plan to deliver the global classroom over three semesters. We have witnessed the value of using a global classroom in that students are able to learn much more when international perspectives and the associated discussion of different cultural contexts are incorporated into their learning. The PDSA cycle was useful as were the four components of an effective collaborative global project. Lessons learned can inform others to use our work as a framework when designing and implementing a global classroom. Our hope is the use of a global classroom approach to teach concepts that are central to EOL care, such as advance care planning and cultural competence, will become part of educational programs in healthcare to enhance learning in an international context.

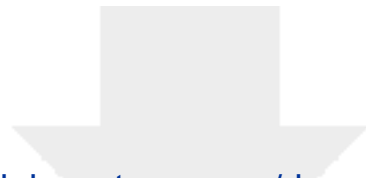
## References

- American Association of Colleges of Nursing (2016). *ELNEC fact sheet*. Retrieved from <http://www.aacn.nche.edu/elneec/about/fact-sheet>
- Bailey, C., & Hewison, A. (2014). The impact of a 'critical moments' workshop in undergraduate nursing students' attitudes to caring for patients at the end-of-life. *Journal of Clinical Nursing*, 23(23-24), 3555-3563.
- Berwick, D.M. (2003) Improvement, trust, and the healthcare workforce. *Quality and Safety in Health Care*, 12(1), i2-i6.
- Boaden, R., Harvey, G., Moxham, C. & Proudlove, N. (2008) *Quality Improvement: Theory and practice in health care*. National Health Service Institute for Innovation and Improvement, Coventry House, University of Warwick Campus, Coventry, CV4 7AL.
- Department of Health (2008). End-of-life Care Strategy, Promoting high quality care for all adults at the end-of-life. Retrieved from <https://www.gov.uk/government/publications/end-of-life-care-strategy-promoting-high-quality-care-for-adults-at-the-end-of-their-life>
- Iles, V. & Sutherland, K. (2001) *Organisational change: A review for health care managers, professionals and researchers*. National Co-ordinating Centre for NHS Service Delivery and Organisation Research and Development, London.
- Institute of Medicine of the National Academies (2014). *Dying in America: Improving quality and honoring individual preferences near the end-of-life*. Washington, D.C.: National Academies Press.
- Kilo, C.M. (1998) A framework for collaborative improvement: Lessons learned from the Institute of Healthcare Improvement's breakthrough series. *Quality Management in Healthcare*, 6(4), 1-13.

- 254 Langley, G.L., Moen, R., Nolan, K.M., Nolan, T.W., Norman, C.L. & Provost, L.P. (2009).  
255 *The improvement guide: A practical approach to enhancing organizational*  
256 *performance* (2nd ed.). San Francisco, CA: Jossey-Bass Publishers.
- 257 Larusson, J.A., & Alterman, R. (2009). Wikis to support the ‘collaborative’ part of  
258 collaborative learning. *Computer-Supported Collaborative Learning*, 4, 371–402.
- 259 Lock, J.V. (2015). Designing learning to engage students in the global classroom.  
260 *Technology, Pedagogy and Education*, 24(2), 137-153.
- 261 Manso, M., & Garzón, M. (2011). Designing effective global collaborative projects. *Learning*  
262 *and Leading with Technology*, 39, 32–33.
- 263 Murgatroyd, S., & Couture, J.C. (2010). *Using technology to support real learning first in*  
264 *Alberta schools*. The Alberta Teachers’ Association. Retrieved from:  
265 [http://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Research-](http://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Research-Updates/PD-86-17)  
266 [Updates/PD-86-17](http://www.teachers.ab.ca/SiteCollectionDocuments/ATA/Publications/Research-Updates/PD-86-17)
- 267 National Health Services Improvement (2010). *Bring lean to life: Making processes flow in*  
268 *healthcare*. Leicester, England. Retrieved from  
269 [http://webarchive.nationalarchives.gov.uk/20160805123925/http://www.nhs.uk/](http://webarchive.nationalarchives.gov.uk/20160805123925/http://www.nhs.uk/resource-search/publications/nhs-imp-lean.aspx)  
270 [resource-search/publications/nhs-imp-lean.aspx](http://webarchive.nationalarchives.gov.uk/20160805123925/http://www.nhs.uk/resource-search/publications/nhs-imp-lean.aspx)
- 271 National Hospice and Palliative Care Organization (2016). *Advance care planning*. Retrieved  
272 from <http://www.nhpco.org/advance-care-planning>
- 273 National Quality Strategy (NQS) (2014). *National strategy for quality improvement in health*  
274 *care: 2014 annual progress report to Congress*. Retrieved from  
275 <http://www.ahrq.gov/workingforquality/reports.htm>
- 276 Nelson, K. (2008). *Teaching in the digital age: Using the Internet to increase student*  
277 *engagement and understanding* (2nd ed.). Thousand Oaks, CA: Corwin Press.



- 278 Papadopoulos, I. (2003). The Papadopoulos, Tilki and Taylor model for the development of  
279 cultural competence in nursing. *Journal of Health, Social and Environmental Issues*,  
280 4, 5–7.
- 281 Powell, A.E., Rushmer, R.K. & Davies, H.T.O. (2009) *A systematic narrative review of*  
282 *quality improvement models in health care*. NHS Quality Improvement Scotland.  
283 Report No. 1844045242.
- 284 Riner, M. (2011). Globally engaged nursing education: An academic program framework.  
285 *Nursing Outlook*, 59, 308–317.
- 286 Scoville, R., Little, K., Rakover, J., Luther, K. & Mate, K. (2016) *Sustaining improvement*.  
287 IHI White Paper. Institute for Healthcare Improvement, Cambridge,  
288 Massachusetts. Retrieved from  
289 <http://www.ihl.org/resources/Pages/IHIWhitePapers/Sustaining-Improvement.aspx>
- 290 Slack (2016). *Using Slack: Product*. Retrieved from <https://slack.com/is>
- 291 Thomas, D., & Brown, S.J. (2011). *A new culture of learning: Cultivating the imagination for*  
292 *a world of constant change*. Lexington, KY: CreateSpace Independent.
- 293 U.S. National Library of Medicine (2016). *What is palliative care?* National Institutes of  
294 Health. Retrieved from  
295 <http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000536.htm>
- 296 Zoom Video Communications, Inc. (2016). *Why choose Zoom?* Retrieved from  
297 <https://zoom.us/whyzoom>



[Click here to access/download](#)

**Author Statement/ICMJE Form**  
**Baernholdt Author form.pdf**

